First of all, Applicant would like to thank the Examiner for his indication that claims 7-9 and 16 would be allowable if written in independent form including all the limitations in the base claims and any intervening claims.

Section 102 (e) Rejection

The Examiner rejected claims 1-4, 10-14 and 17-19 under 35 USC Sec. 102(e) as being anticipated by Murayama et al. (USPN 6,346,936) (hereinafter "Murayama"). In formulating the rejection, the Examiner asserts that Murayama discloses all the claimed subject matter. More specifically, in claim 1, the Examiner notes that: the "image signal processing circuit" is disclosed by Murayama's RGB signal processing circuit (Fig. 1, col. 1, lines 20-26); the "image display unit" is disclosed by Murayama's LCD panel 30 of the LCD display (Fig. 1, col. 1, lines 31-37); and the "control circuit" is disclosed by Murayama's timing generator 4 which includes a PLL circuit 41, a timing generating unit 46 and a phase shifter 47 (Fig. 5, col. 5, line 36 to col. 6, line 12).

With respect to claims 2-4, the Examiner asserts that they are all disclosed by Murayama's timing generator 4 which includes the PLL circuit 41, the timing generating unit 46 and the phase shifter 47 as shown in Fig. 5.

With respect to claim 10, the Examiner asserts that the further claimed "control unit" that determines the resolution of the image signal is disclosed by Murayama's control input from the external of its timing generator 4.

With respect to claim 11, the Examiner asserts that the further claimed "external control" is disclosed by the same Murayama's control input from the external of its timing generator 4.

With respect to claims 17, the Examiner asserts that the further claimed periodic varying is disclosed by Murayama's phase shifter 47.

In view of the amendment to the claims, Applicant respectfully traverses the Examiner's rejections and will explain in the following.

a) The control circuit recited in claim 1, as amended, varies the waveform characteristic of the image signal periodically, by varying such as frequency

characteristic, amplitude characteristic and phase characteristic or the like of the image signal. (Application, Figs. 2A, 9, 12)

On the other hand, the timing generator 4 in Murayama reference merely generates the timing signal which varies the timing for sampling the image signal periodically. Thus, Murayama does not vary the waveform characteristic of the image signal. (Murayama, col. 4, line 62 to col. 5, line 5). Therefore, Applicant respectfully submits that Murayama does not disclose the control circuit recited in claim 1, as amended, and the Examiner's obviousness rejection of claim 1 based on Murayama should be withdrawn.

b) Since each of claims 2-4, 10 and 11 depend from claim 1 directly or indirectly, it is respectfully submitted that the argument set forth above also applies to these claims. Therefore, Applicant respectfully requests that the Examiner's rejections of these claims be withdrawn.

c) With respect to claims 12-14, 17-19, Applicant respectfully directs the Examiner to the discussion above.

Section 103 Rejection

The Examiner also rejected claims 5-6 and 15 under 35 USC Sec. 103(a) as being unpatentable over Murayama in view of Nishio Kenji (JP Patent No. 06-12195) (hereinafter "Kenji").

With respect to claim 5, where the control circuit is further claimed as having a variable inductance element, the Examiner asserts that it would have been obvious to combine Kenji's coil L1 and L2 into Murayama's system to reduce the moiré generated with the color CRT. With respect to claim 6, where the variable inductance element is further claimed as having a coil with primary and secondary winding, the Examiner asserts that it is disclosed by Kenji's coil L1 and L2 (Fig. 5, page 2, lines 45-59).

In view of the amendment, Applicant respectfully traverses the Examiner's rejections and will explain as follows:

a) As recited in claim 5, as amended, the variable inductance element is where the image signal passes through. And the control circuit in claim 5 periodically

varies the frequency characteristic as the waveform characteristic of the image signal passing through the variable inductance elements by varying the inductance of the variable inductance element.

In contrast to claim 5, as amended, the timing generator 4 of Murayama reference merely generates the timing signal which varies the timing for sampling the image signal periodically, and thus it does not vary the waveform characteristic of the image signal. (Murayama, col. 4, line 62 to col. 5, line 5).

Further, since the current transformed from the alternate voltage synchronizing with the horizontal synchronizing signal flows through both of coils L1 and L2 of the Nishino reference, the display position is varied by vibrating the electronic beams with a microamplitude. That is, Nishino is distinguishable over the inductance element recited in claim 5, as amended, and the image signal does not pass through the coils. Thus, the coils of Nishino do not vary the characteristic of the image signal.

In view of above, the control circuit and the variable inductance element recited in claim 5, as amended, are clearly distinguishable over the timing generator 4 of Murayama reference and the coils L1 and L2 of Nishino reference, respectively.

Further, even if the disclosures in Murayama and Nishino are taken into consideration, the combination is still not the same as the invention recited in claim 5, as amended.

Accordingly, claim 5 of the present invention is patentable over Murayama in view of Nishino.

b) Since claim 6 depends from claim 5, it is respectfully submitted that the same argument set forth above also applies to claim 6.

c) With respect to claim 15, Applicant respectfully directs the Examiner to the discussion above.

Conclusion

In view of the amendment to the claims and the discussion above, it is respectfully requested that the Examiner's rejections be withdrawn. The Examiner is encouraged to contact the undersigned attorney to discuss any matter relating to the present application.

Respectfully submitted,
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Reg. No. 35,742

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Enclosure: Claim Amendment (marked-up version)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope to: Commissioner of Patents and Trademarks, Washington D.C. 20231 on: Nov 27, 2002
(Date of deposit)

BIRCH, STEWART, KOLASCH & BIRCH, LLP
Susan M. Langworthy
(Signature)
Nov 27, 2002
(Date of Signature)

CLAIM AMENDMENT

(All pending claims are listed below)

(Note: Insertion = double underlined; deletion = strikethrough)

1. **(Amended)** An image display apparatus, comprising:

an image signal processing circuit receiving an image signal and processing the image signal for display as an image;

an image display unit receiving the image signal processed by the image signal processing circuit, and displaying the processed image signal as an image on a screen; and

a control circuit varying a waveform characteristic of the image signal in a periodic manner.

2. **(Amended)** The image display apparatus of claim 1, wherein the image is divided into spatial lines and temporal frames, and the control circuit alters said waveform characteristic once per spatial line in each temporal frame.

3. **(Amended)** The image display apparatus of claim 2, wherein the control circuit also alters said waveform characteristic once per said temporal frame in each said spatial line.

4. **(Amended)** The image display apparatus of claim 3, wherein the control circuit comprises a timing circuit receiving a first synchronizing signal indicating said spatial lines and a second synchronizing indicating said temporal frames, and generating a timing signal by dividing a frequency of the first synchronizing signal, toggling the timing signal once per said

spatial line and reversing a phase of the timing signal once per said temporal frame, said waveform characteristic being controlled according to the timing signal.

5. **(Amended)** The image display apparatus of claim 1, wherein the control circuit has a variable inductance element, and varies said waveform characteristic by passing the image signal through the variable inductance element.

6. The image display apparatus of claim 5, wherein the variable inductance element comprises a coil having a primary winding and a secondary winding, the image signal passing through the primary winding, the control circuit alternately opening and closing the secondary winding.

7. The image display apparatus of claim 1, wherein said characteristic is an amplitude characteristic, and the control circuit comprises:

a first amplifier circuit amplifying the image signal with a first gain characteristic;

a second amplifier circuit amplifying the image signal with a second gain characteristic differing from the first gain characteristic; and

a timing circuit selecting the first amplifier circuit and the second amplifier circuit alternately.

8. The image display apparatus of claim 7, wherein the second amplifier circuit includes a frequency compensation network causing the second gain characteristic to differ from the first gain characteristic at certain frequencies.

9. The image display apparatus of claim 1, wherein said characteristic is a timing characteristic, and the control circuit comprises:

a first amplifier circuit amplifying the image signal;

a delay line delaying the image signal;

a second amplifier circuit coupled to the delay line, amplifying the delayed image signal; and

a timing circuit selecting the first amplifier circuit and the second amplifier circuit alternately.

10. The image display apparatus of claim 1, further comprising a control unit that determines a resolution of the image signal and activates the control circuit, depending on the resolution.

11. The image display apparatus of claim 1, further comprising an external control for activating the control circuit if the displayed image includes a moire pattern.

12. **(Amended)** A method of processing an image signal for display as an image by an image display unit, comprising the step of:

periodically varying a waveform characteristic of the image signal.

13. **(Amended)** The method of claim 12, wherein the image is divided into spatial lines and temporal frames, and said step of periodically varying alters said waveform characteristic once per spatial line in each temporal frame.

14. **(Amended)** The method of claim 13, wherein said step of periodically varying also alters said waveform characteristic once per said temporal frame in each said spatial line.

15. The method of claim 12, wherein said step of periodically varying further comprises the step of passing the image signal through a variable inductance element.

16. The method of claim 12, wherein said step of periodically varying further comprises the steps of:

amplifying the image signal with a first gain characteristic to generate a first amplified signal;

amplifying the image signal with a second gain characteristic, differing from the first gain characteristic, to generate a second amplified signal; and

selecting the first amplified signal and the second amplified signal alternately.

17. The method of claim 12, wherein said step of periodically varying further comprises the step of periodically delaying the image signal.

18. The method of claim 12, further comprising the step of determining a resolution of the image signal, said step of periodically varying being performed depending on the resolution.

19. The method of claim 12, wherein said step of periodically varying is performed if the displayed image includes a moire pattern.